

I. Rejection Under 35 U.S.C. §102(e)

Claims 1-11 were rejected under 35 U.S.C. §102(e) as allegedly being anticipated by Chow et al. (U.S. Pat. 5,989,402) ("Chow"). Applicants respectfully traverse.

The Chow reference, while directed to a pioneering invention, does not show all of the features of claim 1 and thus cannot anticipate claim 1 under Section 102(e). MPEP 2131 (To anticipate a claim, the reference must teach every element of the claim). Pending claim 1 is directed to an analysis system that includes the following components:

- (1) a first physical unit, comprising a mounting region for receiving a microfluidic device;
- (2) at least one second physical unit spatially separated from the first physical unit and comprising a material transport system that includes at least a first interface component;
- (3) wherein the first physical unit and second physical unit are oriented with respect to each other whereby the material transport system provides a potential to the microfluidic device through the first interface component to transport material through the microfluidic device; and
- (4) wherein the first interface component is removable from the second physical unit. (Emphasis added).

The Chow reference does not include the element of a material transport system that comprises a first interface component that is removable from the second physical unit. The type of material transport system described in Chow, for example in Figure 2A and accompanying description at cols. 9:55-10:63, is part of an analytical system comprising a first physical unit (or base) 206 comprising a mounting region 208 for receiving a microfluidic device 10, at least one second physical unit 202 spatially separated from the first physical unit 206 and comprising a material transport system that includes at least a first interface component 204; wherein the first and second physical units 206, 202 are oriented with respect to each other whereby the material transport system provides a potential to the microfluidic device 10 through the first interface component 204 to transport material through the microfluidic device 10. Applicants first note, contrary to the Examiner's argument at page 2 of the 4/9/2002 Office Action, that the removable

microfluidic device 10 of Chow cannot be the first interface component required by claim 1 because claim 1 requires that the microfluidic device and the interface component be separate components. More specifically, pending claim 1 requires an interface component that is part of a material transport system, which in turn is part of a second physical unit, which is a separate physical element from the microfluidic device.

Moreover, claim 1 differs from the disclosure of Chow in that Chow does not disclose a removable first interface component. Instead, interface component 204 of Chow is fixedly attached to second physical unit 202 and cannot be removably separated therefrom. These claimed novel features of claim 1 are significant in that they allow an increased degree of flexibility for the required material transport system to control fluid movement within or to supply fluids to the microfluidic device (see, e.g., specification of the instant application at page 14, line 27 through page 15 line 14, and page 15, line 29 through page 16, line 5). Thus, for example, by being removable from the second physical unit, the interface component can be used as a spare part or disposable product and can, for example, be interchanged and/or cleaned between each test cycle without providing excessive wear and tear to the remainder of the material transport system. Because these features of claim 1 are not disclosed in the Chow reference, that reference cannot anticipate claim 1 under Section 102(e). Thus, claim 1, and dependent claims 2-13 which depend therefrom, are allowable over the art of record.

II. Non-statutory Double Patenting Rejection

Claims 1-11 were provisionally rejected over copending application no. 09/598,968 under the judicially created doctrine of obviousness-type double patenting. Before addressing the merits of this rejection, Applicant respectfully points out that the Examiner should also issue a provisional double patenting rejection against copending application no. 09/598,968. MPEP 804, Form paragraph 8.35, Examiner Note 7 ("A provisional double patenting rejection should also be made in the conflicting application.").

Although Applicant acknowledges that the Examiner followed the dictates of the MPEP in issuing the provisional double patenting rejections against this application and copending application no. 09/598,968, Applicant respectfully requests that the provisional obviousness-type double patenting rejection be withdrawn in this application because that rejection will create an impasse that will prevent either application from issuing as a patent. An impasse results because the two applications that are subject to the provisional obviousness-type

double patenting rejections are not commonly owned and were filed on the same day. An obviousness-type double patenting rejection is proper when “the claimed subject matter is **not patentably distinct** from the subject matter claimed in a commonly owned patent when the issuance of a second patent would provide unjustified extension of the term of the right to exclude granted by a patent.” (Bold in original, underlining added) MPEP 804, Subsection II B 1. The two co-pending applications that are the subject to the double patenting rejection are not commonly owned. The two applications stem from a collaboration between Caliper Technologies Corp. (“Caliper”) and Agilent Technologies Inc. (“Agilent”). Accordingly, the current application is jointly assigned to Caliper and Agilent. The joint assignment of the current application is evidenced by the assignment record for the current application in Appendix B. It is Applicant’s understanding that copending application no. 09/598,968 is solely owned by Agilent. Since the two applications are not jointly owned, a terminal disclaimer cannot be used in either application to overcome the double patenting rejection. See 37 C.F.R. § 1.321(c)(3) (Terminal disclaimer requires common ownership).

Moreover, pursuant to MPEP 804, Subsection I B, in such a situation, where the provisional double patenting rejection is the only rejection remaining in the application as it is here (assuming Applicant has adequately addressed the Examiner’s 102(e) rejections above), the MPEP instructs that the Examiner should then withdraw that rejection in the application with the earlier filing date and permit that application to issue as a patent. However, the present case is a unique situation in that both applications were filed on the same day. Thus, so long as application no. 09/598,968 continues to include claims that are not patentably distinct from the pending claims herein, the “provisional” double patenting rejections against the two applications cannot be reasonably overcome in either application, which would mean that neither application could issue as a patent which is an unfair result not contemplated by the MPEP.

Thus, the only viable method of resolving the conflicting applications is an Interference Proceeding because the source of the conflict is a dispute over proper inventorship. To quote the leading patent law treatise *Chisum on Patents*: “The established procedure for resolving inventorship contests is through an interference proceeding in the Patent and Trademark Office.” *Chisum on Patents* § 2.04[7][a], pg. 2-96 (1999). Accordingly, Applicant urges that the Examiner place this application in condition for allowance by dropping the provisional double patenting rejection against this application and placing the conflicting applications into an Interference Proceeding under MPEP 2303.

Applicant notes that the Examiner has also issued a rejection over copending application 09/598,968 based on obviousness under 35 U.S.C. § 103(a). Applicant respectfully asserts that this rejection is moot because copending application no. 09/598,968 has not been determined to be prior art to this application. Since this application and copending application no. 09/598,968 were filed on the same day, the copending application could only be prior art to this application under the provisions of 35 U.S.C. §102(f) or §102(g). An Interference Proceeding properly resolves the issue of whether the copending application is prior art under those sections. Accordingly, Applicant again respectfully requests that the Examiner initiate an Interference Proceeding between this application and copending application 09/598,968 to resolve the issues of inventorship under § 102(f) and priority under §102(g). When the inventorship issue is resolved, the obviousness-type double patenting issue will also be resolved.

CONCLUSION

In view of the foregoing amendments and remarks, Applicants believe that the present application is in condition for allowance and action toward that end is respectfully requested. If the Examiner believes that a telephone interview would expedite the examination of this application, the Examiner is requested to contact the undersigned at the telephone number below.

Respectfully submitted,



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APPENDIX A
Marked Up Version of Claims

2. (Amended) The system of claim 1, **[further comprising a fluid supply system disposed within the second physical unit,]** wherein the **[fluid supply]** material transport system is oriented within the second physical unit to provide at least one fluid **[of]** to the microfluidic device in the mounting region of the first physical unit.

3. (Amended) The system of claim 2, wherein the first interface component and the **[fluid supply]** material transport system comprise at least one common conduit disposed in the second physical unit, the at least one conduit providing both a potential for moving material and at least a first fluid to the microfluidic device.

5. (Amended) The system of claim 3, further comprising a control unit operably coupled to the **[fluid supply]** material transport system, for controlling supply of fluid to the microfluidic device.

9. (Amended) The system of claim **[1]** 8, wherein the **[first]** second interface component is mounted on the **[second physical unit]** first interface component by a bayonet fitting.